

## **IN THE CLAIMS**

This listing of claims replaces all prior versions, and listings, in this application.

1. (currently amended) A method for measuring a plurality of different organisms in a sample comprising:

- (a) contacting said sample with an extraction reagent comprising nitrous acid, thereby forming an assay composition; and
- (b) measuring, in said assay composition, markers of said plurality of organisms so as to measure said plurality of different organisms;

wherein said plurality of different organisms includes a first organism that is a gram positive bacterium, said extraction reagent extracts a first marker from said first organism and said measuring step comprises measuring said first marker; and

wherein said plurality of different organisms includes a second organism selected from the group consisting of fungi, viruses and gram negative bacteria, said extraction reagent extracts a second marker from said second organism and said measuring step comprises measuring said second marker.

~~2. (cancelled) The method of claim 1, wherein said plurality of organisms includes a first organism that is a gram positive bacterium, said extraction reagent extracts a first marker from said first organism and said measuring step comprises measuring said first marker.~~

3. (currently amended) The method of claim 1 ~~2~~, wherein said first organism is a Streptococci or Enterococci bacterium and said first marker is a cell wall-associated antigen.

4. (original) The method of claim 3, wherein said first organism is a Streptococci Group A, B, F or G bacterium and said first marker is a group specific antigen.

5. (cancelled) ~~The method of claim 2, wherein said plurality of different organisms includes a second organism selected from the group consisting of fungi, viruses and gram negative bacteria.~~

6. (currently amended) The method of claim 1 2, wherein ~~said plurality of different organism includes a second organism comprising a second marker, said measuring step comprises measuring said second marker and~~ said second marker is a protein, nucleic acid and/or lipid marker.

7. (original) The method of claim 1, wherein said sample comprises mucus.

8. (original) The method of claims 1, wherein said sample is a nasal or pharyngeal sample or genital discharge sample.

9. (original) The method of claim 1, wherein said extraction reagent further comprises a surfactant.

10. (original) The method of claim 1, wherein said markers are measured in said assay composition using a multiplexed assay format.

11. (original) The method of claim 10, wherein said multiplexed assay format is a multiplexed immunoassay format.

12. (original) The method of claim 11, wherein said measuring step comprises contacting said assay composition with a patterned array of immobilized antibodies.

13. (original) The method of claim 1, further comprising neutralizing the pH of said assay composition.

14. (previously presented) The method of claim 1, wherein said sample is an upper respiratory tract sample and:

- (i) said contacting of said upper respiratory tract sample with said extraction reagent is done under conditions suitable to extract a cell wall-associated antigen from a streptococcus bacterium; and
- (ii) said measuring, in said assay composition, markers of said plurality of organisms comprises measuring said antigen and one or more additional markers including a marker of at least one virus.

15. (original) The method of claim 14, wherein said streptococcus bacterium is a Streptococci Group A, B, F or G bacterium and said antigen is a group specific antigen.

16. (original) The method of claim 15, wherein said marker of at least one virus is a protein, nucleic acid and/or lipid marker.

17. (original) The method of claim 15, wherein said virus is selected from Rhinovirus virus, Parainfluenza virus, Influenza type A, B or C virus, Respiratory syncytial virus (RSV), Coronavirus, Adenovirus, Coxsackie A virus, Herpes simplex virus, Enterovirus, Epstein-Barr virus, Cytomegalovirus, or Papillomavirus.

18. (original) The method of claim 15, wherein said one or more additional markers include a marker of influenza A, a marker of influenza B and a marker of respiratory syncytial virus (RSV).

19. (original) The method of claim 14, wherein said sample is a nasal wash or a throat swab.

20. (original) The method of claims 14, wherein said extraction reagent further comprises a surfactant.

21. (original) The method of claim 14, wherein said antigen and said one or more additional markers are measured in said assay composition using a multiplexed assay format.

22. (original) The method of claim 21, wherein said multiplexed assay format is a multiplexed immunoassay format.

23. (original) The method of claim 21, wherein said measuring step comprises contacting said assay composition with a patterned array of immobilized antibodies.

24. (original) The method of claim 14, further comprising neutralizing the pH of said assay composition.

Claims 25-56 (canceled)

57. (currently amended) A method for measuring two or more markers comprising:

(a) contacting a sample containing a plurality of ~~one or more~~ organisms with an extraction reagent comprising an oxidizing acid, thereby preparing an assay composition; and

(b) measuring said two or more markers within said assay composition;  
wherein said plurality of organisms comprises a first organism that is a gram positive bacterium and a second organism selected from the group consisting of fungi, viruses and gram negative bacteria.

58. (currently amended) A method for measuring one or more markers comprising:

(a) contacting a sample containing a plurality of ~~one or more~~ organisms with an extraction reagent comprising an oxidizing acid, thereby preparing an assay composition; and

(b) measuring said one or more markers in said assay composition, wherein at least one of said one or more markers includes a marker selected from the group consisting of protein, peptide, toxin, nucleic acid, and lipid;

wherein said plurality of organisms comprises a first organism that is a gram positive bacterium and a second organism selected from the group consisting of fungi, viruses and gram negative bacteria.

59. (original) A method for measuring one or more markers comprising:

(a) contacting a sample containing one or more organisms with an extraction reagent comprising an oxidizing acid, thereby preparing an assay composition; and

(b) measuring said one or more markers in said assay composition, wherein at least one of said one or more markers is a viral marker or a fungal marker.

Claims 60-131 (canceled)